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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/748,433

12/26/2000

Chin-Hui Lee

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09/08/2004

LUCENT TECHNOLOGIES INC.
DOCKET ADMINISTRATOR
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HOLMDEL, NJ 07733

EXAMINER

OPSASNICK, MICHAEL N

ART UNIT

PAPER NUMBER

2655

6

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,433

Applicant(s)

LEE ET AL.

Examiner

Michael N. Opsasnick

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2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.5
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

1. Claim 37 is objected to because of the following informalities: Claim 37 depends upon claim 16, and therefore is a repeat of claim 17. It appears that a typographical error has occurred, and that claim 37 should depend from claim 36. Appropriate correction is required.

Allowable Subject Matter

2. Claims 6,7,16,17,26,27, 36 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-5,8,10-15,18,20-25,28,30-36,38,40 are rejected under 35 U.S.C. 102(b) as being anticipated by McDermott et al (“A Telephone-Based Directory Assistance System...”, Acoustics, Speech, and Signal Processing, 1996).

As per claims 1,11,21,31, McDermott et al teach a method of training a scoring matrix to be used in a classification system based on training data (abstract, Fig. 1), comprising:

“generating an initial scoring matrix....therefor” as generating an initial scoring based on training data (Fig. 1, initial utterances and transcriptions are sent to the reference models for initial, as well as periodic, training); initialing generating classes with a set of features (as classifying into categories a set of features -- pp 3346, section 2.2, lines 2-13), and the subsets based on phoneme models and subsets (section 5).

“based on the initial scoring.....error rate” as based on the initial scoring, generating scoring based on misclassification, and adjusting the parameter so that only the top few incorrect categories are used in the measure (section 2.2, lines 1-5, 10-18))

As per claims 2,12,22,32, McDermott et al teaches GPD (abstract)

As per claims 3,13,23,33, McDermott et al teaches iteratively adjusting until the loss is at a accepted rate (section 2.2, lines 19-26 → on page 3347)

As per claims 4,14,24,34, McDermott et al teaches loss threshold (section 2.2, lines 23-26, pp 3347)

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As per claims 5,15,25,35, McDermott et al teaches minimal frame errors (section 2.3, lines 1-7).

As per claims 8,18,23,38, McDermott et al teaches the apparatus to be used in a telephone based directory system, which includes call forwarding (section 3).

As per claims 10,20,30,40, McDermott et al teaches a string category search that is context-independent → not stop word dependent (section 2.4).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9,19,29, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott et al in view of Poirier et al (6321372).

As per claims 9,19,29, and 39, McDermott et al does not explicitly teach using the disclosed technique for document retrieval, however, Poirier et al (6321372) teaches

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document searching a lower level class defined by input characters (col. 21 lines 20-32), which can be also used for speech extraction as input (col. 23 lines 25-31). Therefore, it would have been obvious to one of ordinary skill in speech and text processing to modify the teachings of McDermott et al with converting the input speech to a text based searching method because it would advantageously allow for the system to handle multiple types of data input, including speech and text (Poirier et al (6321372), col. 22 – lines 47-52).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno

9/7/2004

A handwritten signature in black ink, appearing to read 'Dan Abebe', with a stylized, flowing script.

**DANIEL ABEBE
PRIMARY EXAMINER**